

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-313704

(43)Date of publication of application : 14.11.2000

---

(51)Int.Cl.

C08F 2/00  
C08F 2/02  
C08F 4/34  
C08F 20/10

---

(21)Application number : 11-124431

(71)Applicant : SOKEN CHEM & ENG CO LTD

(22)Date of filing : 30.04.1999

(72)Inventor : TAKIZAWA YOICHI  
YOSHIDA TETSUYA

---

### (54) PRODUCTION OF ACRYLIC POLYMER

#### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a method for stably proceeding the polymerization by substantially using no solvent and using a thermally decomposition type polymerization initiator without uncontrollability of polymerization reaction.

**SOLUTION:** This invention relates to a bulk polymerization of polymerizable unsaturated bond-bearing monomers mainly comprising acrylic alkyl esters, a reaction mixture in which 0.0001-0.5 pts.wt. of a polymerization initiator having 10 hours of the half-life temperature per 100 pts.wt. of a monomer bearing a polymerizable unsaturated bond is homogeneously admixed, and their temperature is adjusted to 20-80°C to start the polymerization reaction in the reaction mixture. After the start of the polymerization, the maximum temperature of the reaction mixture is attained in the range of from 100-140°C by utilizing the self-heating of the reaction system as the polymerization initiator is consumed and 15-50 wt.% of the monomer bearing a polymerizable unsaturated bond used in the polymerization are polymerized. According to this invention, an acrylic alkyl ester or the like can be bulk-polymerized under control.